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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,461	08/23/2006	John MacDougall	SNC-134.PCT/US(5008-134-1	9756
55678	7590	12/24/2009		
Miltons IP/p.i. 225 Metcalfe Street Suite 700 Ottawa, ON K2P 1P9 CANADA			EXAMINER CHAMBERS, TROY	
			ART UNIT 3641	PAPER NUMBER
			MAIL DATE 12/24/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,461	Applicant(s) MACDOUGALL, JOHN	
	Examiner Troy Chambers	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/17/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. The restriction requirement mailed 08/04/2009 has been withdrawn in view of applicant's arguments.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "casing" (claim 20) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 requires a gilding metal jacket to be "thicker than that normally used on conventional ball projectiles of similar calibre." It is not known what is meant or encompassed by such a phrase since it is not known what is "normally used".
3. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 requires a cartridge that is "free of toxic components". However, this limitation is vague and indefinite since it does not specify to whom or what the toxicity applies to. Even lead is not toxic in certain quantities and when not in contact with a human being.

Claim Rejections - 35 USC § 102

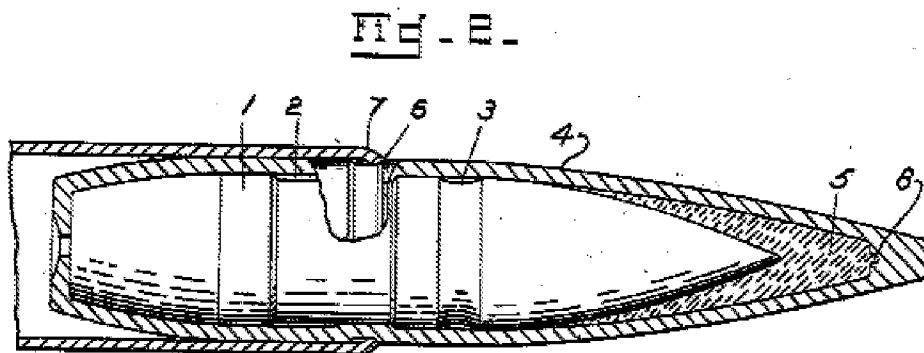
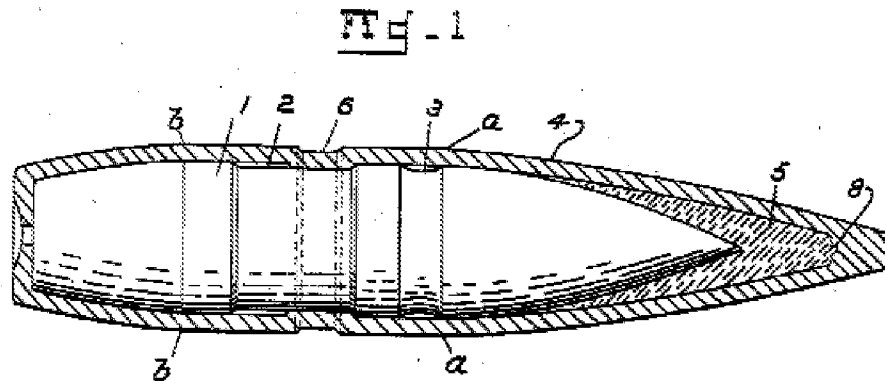
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 8, 10, 11, 14, 15 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2322751 issued to Studler.



3. With respect to claim 1, Studler discloses a projectile having an engravable jacket 4; and a central cylindrical core 1 having an annular grooves 2, 3 at its "midsection portion". The grooves 2, 3 discontinue contact between the core 1 and the

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jacket 4 at those locations. The midsection grooves taper toward both ends of the projectile.

4. With respect to claims 2-4, the gap formed by the tapered grooves 2, 3 fully encircle the core 1 and form a space between said jacket 4 and said core.

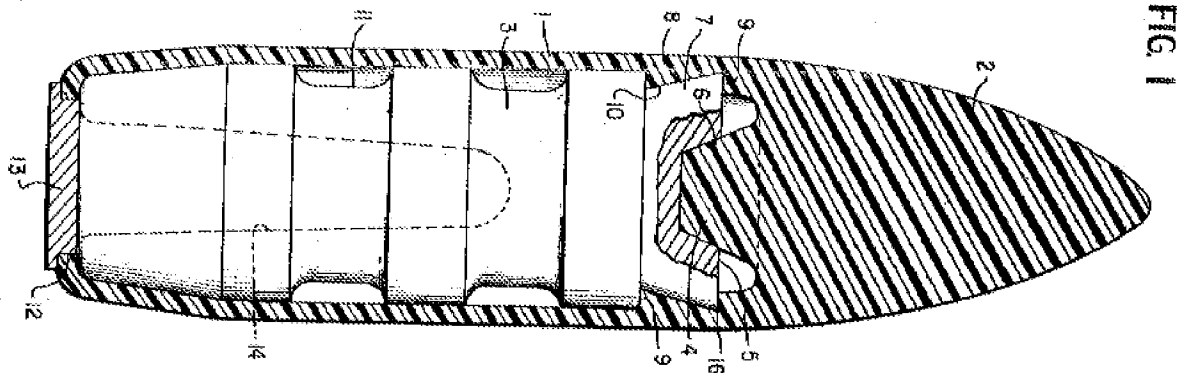
5. With respect to claim 5, the midsection tapers and is therefore frustoconical in shape.

6. With respect to claims 10 and 11, the grooves 2, 3 are comprised of empty space and therefore occupied by air.

7. With respect to claim 14, Figures 1 and 2 show the core 1 having an ogival shape. The junction between the forward and the midsection provides a "smooth" transition zone.

8. With respect to claim 15, Figures 1 and 3 appear to show the rear of the core 1 tapering inward.

9. Claims 1-4, 8, 10, 11 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3348486 issued to Rapp.



10.

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11. With respect to claim 1, Rapp discloses a projectile comprising an engravable jacket 1 having a central core with a "midsection portion" not in continuous contact with the jacket because of the presence of annular grooves 11. The annular grooves taper toward the forward and rear ends of the projectile.

12. With respect to claims 2-4, the gap formed by the tapered grooves 11 fully encircle the core 3 and form a space between said jacket 1 and said core.

13. With respect to claims 10 and 11, the grooves 11 are comprised of empty space and therefore occupied by air.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 6, 7, 9, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studler in view of established case law. Studler discloses a jacketed projectile as discussed above including a midsection with a taper. However, Studler does not disclose the dimensions as claimed by the applicant. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the dimensions claimed by the applicant, since it has been held that where the general condition of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

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16. Claims 12, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studler. Studler discloses a jacketed projectile as discussed above. Studler does not disclose the use of the materials as claimed. However, the use of both steel as a core material for a bullet (see, e.g., US 3553804) and a jacket of gilding material (gilding material has been defined by US 20020020324 as being known in the art as a combination of either 95% copper and 5% zinc or 90% copper and 10% zinc) are well known in the art and the use of either would have been obvious to the skilled artisan.

17. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Studler. Studler discloses a jacketed projectile as discussed above. Studler does not disclose the use of a casing as claimed. However, it is well known in the art to use a casing to seat a projectile within the chamber of a weapon. Furthermore, it is even more well known that casings are normally composed of brass (see, e.g., US 2111167).

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited on form PTO-892 are cited as of interest to show similar types of jacketed projectiles.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is 571-272-6874 and whose email address is troy.chambers@uspto.gov. The examiner can normally be reached on M-F from 8 am to 4 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Troy Chambers/
Primary Examiner
Art Unit 3641

/tc/

12/22/2009